

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently amended) A method of detecting a telecine pattern embedded within a first sequence of video frames, the method comprising:

receiving at least a portion of the frames from the first sequence of video frames;

measuring a plurality of differences between frames and their adjacent frames in the sequence and storing the measured differences;

~~associating~~ arranging the measured differences into a plurality of data groups ~~according to predicted telecine patterns for analysis wherein each data group of the plurality comprises an "in-group" and one or more "out-groups," wherein each in-group comprises two or more selected measured differences between adjacent frames that are spaced 5 frame intervals apart, wherein each corresponding out-group comprises other measured differences between adjacent frames; [[and]]~~

performing a statistical analysis of the in-groups and the out-groups of the plurality of data groups to determine which data group has the in-group that corresponds to duplicate frames of the telecine pattern; and

generating a second sequence of video frames from the first sequence by removing one or more duplicate frames from the first sequence.

2. (Original) The method as defined in Claim 1, wherein the measurement of the differences between frames includes comparing every fourth pixel of a first frame to every fourth pixel of a second frame.

3. (Original) The method as defined in Claim 1, wherein the measurement of the differences between frames includes computing a summation of an absolute sum of differences between pixels.

4. (Original) The method as defined in Claim 1, wherein the measurement of the differences between frames includes computing a summation of the square of the differences between pixels.

5. (Original) The method as defined in Claim 1, wherein the measurement of the differences between frames is further normalized according to a number of pixels per frame that are compared.

6. (Original) The method as defined in Claim 1, wherein the measurement of the differences between frames is further saturated to a predetermined level.

7. (Original) The method as defined in Claim 1, further comprising:
maintaining the stored differences in a collection;
shifting the stored differences in the collection in response to a new measurement of differences between frames; and
adding the new measurement of differences to the collection.

8. (Original) The method as defined in Claim 1, wherein the statistical analysis includes a computation of a mean.

9. (Original) The method as defined in Claim 1, wherein the statistical analysis includes a computation of a variance.

10. (Original) The method as defined in Claim 1, wherein the statistical analysis includes a computation of a standard deviation.

11. (Original) The method as defined in Claim 1, further comprising varying a sample size of the measured differences analyzed in the plurality of data groups in response to a failure to detect the telecine pattern in a larger portion.

12. (Original) The method as defined in Claim 1, further comprising varying a threshold used for detection of the telecine pattern at least in part based on a selected sample size.

13. (Currently amended) A system that detects a telecine pattern embedded within a first sequence of video frames, the system comprising:

a server adapted to receive at least a portion of the frames from the first sequence of video frames;

means for measuring a plurality of differences between frames and their adjacent frames in the sequence and storing the measured differences;

means for associating arranging the measured differences into a plurality of data groups ~~according to predicted telecine patterns for analysis wherein each data group of the plurality comprises an "in-group" and one or more "out-groups," wherein each in-group comprises two or more selected measured differences between adjacent frames that are spaced 5 frame intervals apart, wherein each corresponding out-group comprises other measured differences between adjacent frames;~~ and

means for performing a statistical analysis of the plurality of data groups to determine which data group has the in-group that corresponds to duplicate frames of the telecine pattern.

14. (Original) The system as defined in Claim 13, wherein the means for measuring a plurality of differences between frames includes means for comparing every fourth pixel of a first frame to every fourth pixel of a second frame.

15. (Original) The system as defined in Claim 13, wherein the measurement of the differences between frames includes means for computing a summation of an absolute sum of differences between pixels.

16. (Original) The system as defined in Claim 13, wherein the statistical analysis includes a computation of a variance.

17. (Currently amended) A computer-readable medium encoded with computer executable instructions for detecting a telecine pattern embedded within a sequence of video frames comprising:

a module with instructions configured to receive at least a portion of the frames from the [[first]] sequence of video frames;

a module with instructions configured to measure a plurality of differences between frames and their adjacent frames in the sequence and storing the measured differences;

a module with instructions configured to associate arrange the measured differences into a plurality of data groups according to predicted telecine patterns; and wherein each data group of the plurality comprises an "in-group" and one or more "out-groups," wherein each in-group comprises two or more selected measured differences between adjacent frames that are spaced 5 frame intervals apart, wherein each corresponding out-group comprises other measured differences between adjacent frames;

a module with instructions configured to perform a statistical analysis of the in-groups and the out-groups of the plurality of data groups to determine which data group has the in-group that corresponds to duplicate frames of the telecine pattern.

18. (Original) The computer-readable medium as defined in Claim 17, wherein the module with instructions configured to measure the plurality of differences between frames

includes instructions for computing a summation of an absolute sum of differences between pixels.

19. (Original) The computer-readable medium as defined in Claim 17, wherein the statistical analysis includes a computation of a variance.

20. (Original) The computer-readable medium as defined in Claim 17, wherein the statistical analysis includes a computation of a standard deviation.

21. (New) The method as defined in Claim 1, wherein arranging comprises arranging a sample size of 20 measured differences of adjacent frames

22. (New) The method as defined in Claim 1, wherein the plurality of data groups comprises 5 data groups, wherein each of the in-groups of the 5 data groups comprises a different frame position within 5 consecutive frame positions.

23. (New) The method as defined in Claim 1, wherein each data group comprises the in-group and one out-group, wherein the one out-group comprises the measured differences for a remainder of the frame differences not included in the in-group.

24. (New) The method as defined in Claim 1, wherein arranging comprises initially arranging a sample size of 20 measured differences of adjacent frames, further comprising decreasing the sample size to 15 measured differences in response to a failure to detect the telecine pattern in the sample size of 20.